REMARKS

Reconsideration and allowance of this application are respectfully requested.

Claims 1-9 are all the claims pending in the application.

I.   Summary of Final Office Action

Claims 2-3 and 6-7 are objected as further corrections to some terms used therein are allegedly required.

Claims 2, 3 and 9 are rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness.

Claims 1, 4-5 and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Lee (USP 5,973,725).

Claims 2-3, 6-7 and 9 would be allowable if rewritten or amended to overcome the objections and rejection(s) under 35 U.S.C. § 112, second paragraph.

II.   Claim Amendments

In this Amendment, claims 2, 3, 6 and 9 are amended. No new matter is added. Applicant respectfully requests entrance of amended claims.

III.   Analysis of Objection, 35 U.S.C. § 112 Rejection and Allowable Claims

As claims 2, 3, 6 and 9 are amended according to the Examiner's indication in the office action, and require only the Examiner's cursory review, Applicant respectfully requests withdrawal of the claim objection and rejections under 35 U.S.C. § 112.

Applicant also requests the Examiner to hold rewriting of the allowable claims in

abeyance until the arguments presented with respect to rejected claims have been reconsidered.

IV.   Analysis of 102(b) Rejection of Claims 1 and 5

In rejecting claims 1 and 5 over Lee, the Examiner maintains his previous position by

alleging as follows:

(i) the claimed channel state judging section and a corresponding operation are taught by
the interference rejection filter (NRF) 308, post processor 318 and NRF selection controller 326
of the reference; and

(ii) the claimed equalizer and a corresponding operation are taught by the adaptive
equalizer 312 of the reference.

In this outstanding office action, since the claims were amended in the previous

Amendment by incorporating the clause reading *"wherein the channel state is one of a static*

state and a dynamic state", the Examiner adds as follows:

> [a]lthough, Lee does not explicitly show or suggest that the channel
> state(s) of the NRF path and non-NRF path is one of a static state and
> a dynamic state as recited in the amendments of claims 1 and 5, Lee
> clearly teaches that the channel states of the NRF path and non-NRF
> path are detected using the data of a known signal period (the data of
> the field sync segment period in the case of GA-VSB signal).

The Examiner further alleges that:

> [i]t is inherent and well known to a person skill[ed] in the art that a
> transmission channel state for a VSB broadcast signal is a dynamic
> state if varying with time, or a transmission channel state for a VSB
> broadcast signal is a static state if not varying with time, for example
> described in paragraph [0048] of the well known U.S. Publication No.
> 2003/0223519 A1 (Jeong et al.).

Applicant respectfully disagrees.

In the office action, the Examiner admits that Lee does not disclose that the channel

state(s) of the NRF path and non-NRF path is one of a static state and a dynamic state as recited

in the amendments of claims 1 and 5. However, the Examiner alleges that the claimed channel

state judging section to determine whether the channel state is in a dynamic or static state is

disclosed inherently or with a support from Jeong as the term "channel states" used in the claim

is taught by Jeong.

Even though the term "channel states" may be interpreted as meaning a static or dynamic

state as disclosed in Jeong, or may be inherent in the art, the Examiner has gone too far in

applying the term to Lee's disclosure where the term is explicitly used otherwise.

When the term "channel states" was recited only once in col. 5, lines 10-15 of Lee, it is

explicitly used to determine which signal, between an NRF path signal and a non-NRF path

signal, has less errors such as a ghost error and a phase error. These errors are removed by the

adaptive equalizer 320 and the phase tracker 314. Specifically, since both an NRF path signal

and a non-NRF path signal (from the inverse NRF 328) input to the NRF selection determiner

330 (Fig. 4 of Lee) pass through the adaptive equalizer 320 and the phase tracker 314 in the post

processor 318, the two signals are clear from a ghost error and a phase error to some extent.

Here, the only difference between the two signals is only which signal has been subject to

interference rejection filtering by an NRF unit. At this point, it is determined which signal has a

less ghost error and phase error between an NRF path signal and a non-NRF path signal. Based

on this disclosure, detecting "channel states" in Lee is easily understood as indicating detecting

8

which signal has less errors no matter what the signals are in a dynamic state or a static state. In the cited col. 5, lines 10-15 of Lee, "to select the channel with the better channel condition" is to select a less-error signal between the two signals. There is no suggestion that the term "channel states" in Lee indicate a dynamic or static state. Lee's system does not determine between dynamic and static states; and does not concern whether the signals are dynamic or static. Further, it is also well known that any of a dynamic signal and a static signal can have errors or not. Whether a channel is in a dynamic or static state is one thing, and whether a signal has an error or not is another.

In summary, even though the term "channel states" is used in other references as suggesting dynamic and static states, Lee has used the same term in a completely different manner.

Therefore, Applicant respectfully submits that since the claimed channel state judging section and corresponding operation are not taught by Lee, the claims would not have been anticipated over the reference.

The remaining claims should be allowable at least due to their dependency.
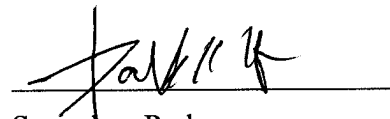
V.   Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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